

RISKS AND CORRELATES OF INTIMATE PARTNER VIOLENCE AMONG
LGB+ AND HETEROSEXUAL COLLEGE STUDENTS

BY

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ABSTRACT

RISKS AND CORRELATES OF INTIMATE PARTNER VIOLENCE AMONG
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The issue of intimate partner violence (IPV) is widespread among members of all sexual identities. However, researchers have found sexual minority members to be at a heightened risk for experiencing IPV. This is not to say that LGBQ+ individuals are inherently more violent, but rather they experience intense stigma from the world around them. This stigma, whether it be institutionalized or enacted by peers or family members, can lead to negative health consequences such as depressive symptomology and problematic drinking behaviors. Both mental health issues such as depression and problem drinking have been shown to be linked to a higher risk of IPV. The current study explored the complex relation between different sexual minority groups, alcohol use, depression symptoms, and IPV victimization in a sample of 1,268 undergraduate students. Results indicate no significant differences in the rates of any type of lifetime IPV victimization between sexual minority students and heterosexual students for both women and men. However, there were significant differences in reported depressive symptomology with sexual minority men and women experiencing higher rates of depressive symptomology when compared to heterosexual men and women. Additionally, alcohol use and depressive symptoms were found to be significantly different among students who had experienced physical IPV victimization compared to those who had not regardless of sexual orientation. This study provides important implications for those who work with and do research

among college students such as targeted programming addressing the issue of IPV and its correlates among sexual minority students.

INTRODUCTION

The issue of intimate partner violence (IPV) poses a significant health risk for many individuals in the United States (NCAVP, 2016). Incidents of IPV are characterized by physical violence, sexual violence, psychological aggression, and stalking behaviors by an intimate partner. The Centers for Disease Control and Prevention (CDC) reported that nearly one in four women along with one in ten men have experienced violence by their intimate partner at some point during their lifetime (Smith et al., 2018). Research examining rates and correlates of IPV among lesbian, gay, and bisexual relationships found that rates of IPV within sexual minority relationships are higher compared to heterosexual relationships (Edwards et al., 2015; Halpern, Young, Waller, Martin, & Kupper, 2004; Langenderfer-Magruder, Walls, Whitfield, Brown, & Barrett, 2016; Martin-Storey, 2015; Porter & Williams, 2011; Walls et al., 2019; Whitton, Newcomb, Messinger, Byck, & Mustanski, 2019). For instance, according to the 2010 National Intimate Partner and Sexual Violence Survey, 35% of heterosexual women compared to 43.8% of lesbian women and 61.1% of bisexual women experienced rape, physical violence, and/or stalking victimization by an intimate partner in their lifetime. Rates among men follow a similar trend with 29% of heterosexual men compared to 26% of gay men and 37.3% of bisexual men having experienced rape, physical violence, and/or stalking victimization by an intimate partner in their lifetime (Walters, Chen, & Breiding, 2013). The higher rates of IPV among LGB+ individuals compared to non-LGB+ individuals make it important to conduct research to understand what places LGB+ individuals at higher risk for IPV in order to inform primary prevention strategies.

Minority stress theory highlights heightened degrees of societal stress experienced by sexual minority individuals that can subsequently lead to poor mental health or alcohol use

behaviors (Meyer, 2003). Grounded in minority stress theory, alcohol use and symptoms of depression are commonly cited in the literature as risk factors for IPV victimization (Descamps, Rothblum, Bradford, & Ryan, 2000; Organization, 2013). Although researchers have also generally found a connection between alcohol use, depression, and sexual minority status, most have failed to differentiate between sexual minority groups such as lesbian women, gay men, and bisexual men and women. Additionally, among college students, alcohol use and depression are extremely salient issues (Pedrelli, Shapero, Archibald, & Dale, 2016). Thus, the current study explored the relationship between different sexual minority groups, alcohol use, depression symptoms, and IPV victimization in a sample of college students. More specifically, the study examined whether problem drinking and depressive symptoms are associated with experiencing IPV, whether sexual minority status is associated with higher rates of problem drinking and depressive symptoms, and whether sexual minority status is associated with higher rates of IPV compared to heterosexual women and men.

Literature Review

Theoretical Framework

Among sexual and gender minority individuals who have experienced IPV, minority stress theory identifies correlates that contribute to increased rates of IPV victimization. Minority stress theory posits that sexual minority individuals experience additional psychological stressors from exposure to stigmatizing societal structures that subsequently impact things like mental health (e.g., depression, suicide) and substance use (Meyer, 2003). Meyer (2003) suggested that minority stressors influence LGB+ individuals through external, objective stressors (e.g., familial abuse, homelessness, trading sex), expectations of these stressors, and internalization of the negative social attitudes of others (e.g., alienation, lack of integration within one's community,

internalized homonegativity). While depression and alcohol use behaviors are detrimental on their own, they have also been linked to a heightened risk for experiencing IPV (Descamps et al., 2000; Langenderfer-Magruder et al., 2016; World Health Organization, 2013). Although there may be a variety of factors that increase sexual minority individual's likelihood of experiencing IPV, it is possible that higher levels of depression or alcohol consumption contribute to these rates (Baams, Grossman, & Russell, 2015).

IPV Within the LGB+ Community

Higher rates of IPV, and a predisposition for stigma toward the LGB+ community, make lesbian, gay, and bisexual individuals a particularly vulnerable population for victimization (Meyer, 2003). The bulk of research on IPV has centered around heterosexual relationships and although the absolute number of cases may be higher among this population, the prevalence of IPV among sexual minorities is often cited as higher than within heterosexual relationships (Messinger, 2014). Research has recently started to focus its efforts on understanding IPV among sexual minority individuals; however, unique risks and correlates experienced by sexual minorities are still relatively unclear.

Physical IPV is characterized by behaviors (e.g., hitting, kicking, choking, burning, using a knife or gun) that are used purposefully to inflict harm upon one's partner (Smith et al., 2018). Although physical IPV is especially dangerous among individuals of all sexual identities, the prevalence of physical IPV in LGB+ relationships is significantly higher among adolescents (Halpern et al., 2004; Martin-Storey, 2015), college students (Edwards et al., 2015; Porter & Williams, 2011), and adult populations (Houston & McKirnan, 2007) when compared to their heterosexual counterparts. In a large national survey of intimate partner and sexual violence among heterosexual and sexual minority individuals, adult respondents were asked about lifetime

experiences of physical violence by an intimate partner. Among respondents, 29.4% of lesbian women, 49.3% of bisexual women, and 23.6% of heterosexual women had experienced physical IPV by an intimate partner at some point in their lifetimes. Similarly, 16.4% of gay men and 13.9% of heterosexual men reported experiencing physical IPV by an intimate partner at some point in the lifetime (Walters et al., 2013). Edwards and colleagues (2015) found college-aged sexual minority females reported significantly higher rates of physical IPV compared to heterosexual females. In the same study, college-aged sexual minority status males did not significantly differ from heterosexual males in their reporting rates of physical IPV.

Prevalence rates of psychological aggression within LGB+ relationships are generally higher than rates of physical violence (Walters et al., 2013). Emotional or psychological violence can include verbal threats and abuse, coercive control, or threatening behavior (Smith et al., 2018). In 2010, the CDC reported that 63% of lesbian women, 76.2% of bisexual women, and 47.5% of heterosexual women had experienced intimate partner psychological aggression at some point in their lifetime. Among men, 60% of gay men, 53% of bisexual men, and 49% of heterosexual men had experienced psychological aggression by an intimate partner at some point in their lifetime. It is apparent that the LGB+ population may experience IPV at least as frequently as heterosexual women who are generally the focus of prevention, intervention, and screening efforts (Ard & Makadon, 2011). While researchers generally emphasize experiences and correlates of IPV among heterosexual women, it is important to further investigate the differences in rates and correlates of IPV victimization among both women and men who identify as sexual minorities.

Alcohol Use and Abuse

The World Health Organization (2013) identifies a variety of deleterious health effects of IPV including alcohol use. Generally, partner violence victimization and alcohol use have been linked (Waller et al., 2012). Although alcohol use has been identified in the literature as a correlate of IPV among heterosexual respondents, it is still unclear whether drinking behaviors related to IPV are similar in sexual minority individuals. For the most part, researchers have investigated drinking behaviors among heterosexual couples or have failed to differentiate between which respondents identify as heterosexual and which respondents identify as sexual minorities. It is also unclear whether alcohol use is primarily a risk factor of IPV, consequence of IPV, or both. In any sense, there is a burgeoning body of work focused on the issue of alcohol use among sexual minorities that warrants further examination (Hughes, Johnson, Steffen, Wilsnack, & Everett, 2014).

Higher rates of alcohol use among sexual minority individuals are sometimes found in the literature (Coulter et al., 2018; T. Hughes, 2011; Marshal et al., 2008), but few researchers have examined alcohol usage as it relates specifically to LGB+ IPV victimization. Koeppel and Bouffard (2014) who examined the link between IPV victimization, effects of IPV, and sexual minority status found greater alcohol consumption among non-heterosexual individuals compared to their heterosexual counterparts. Additionally, both non-heterosexual and heterosexual victims of IPV scored higher on alcohol use than non-heterosexuals and heterosexuals who reported no prior victimization (Koeppel & Bouffard, 2014). Not only was alcohol consumption found to be higher among non-heterosexual individuals, but those who had experienced IPV also reported higher alcohol use behaviors. Langenderfer-Magruder and colleagues (2016) found that LGBT youth who engaged in binge drinking also had a

significantly increased risk of reporting ever experiencing IPV victimization in their lifetime. Further investigation into the relation between alcohol use and IPV victimization among sexual minority respondents is critical given that there is a strong association between alcohol use and IPV victimization.

Depression

Another important correlate of IPV among sexual minorities is mental health status (Gehring & Vaske, 2017; Hellemans, Loeys, Buysse, Dewaele, & De Smet, 2015; Reuter, Newcomb, Whitton, & Mustanski, 2017; Stults, Javdani, Kapadia, & Halkitis, 2019). Mental health disorders, such as depression and anxiety, are more prominent in sexual minority individuals due to the discrimination and marginalization they face in their schools and communities (Hatchel, Espelage, & Huang, 2017; Woodford et al., 2018). Research has begun to highlight the unique differences between those with multiple intersecting minority identities and how those differences might impact mental health and victimization (Botswick, Hughes, Steffen, Veldhuis, & Wilsnack, 2019). According to the literature, there is also a strong connection found between depression and IPV victimization (Descamps et al., 2000; Walls et al., 2019).

Bridging these two connections, Descamps, Rothblum, Bradford, and Ryan, (2000) found that lesbian women who had experienced IPV victimization reported significantly higher levels of depression than those who had not. Another study found gay and bisexual men who had experienced IPV victimization reported depressive symptoms at higher rates compared to a sample of non-abused men (Houston & McKirnan, 2007). Among a sample of high school students, LGBQ youth who had experienced intimate partner violence reported depression at higher rates when compared to both LGBQ non-victims and heterosexual victims of intimate partner violence (Edwards, 2018). Additionally, female victims reported higher rates of

depression compared to male victims with bisexual and questioning females at the highest risk for depression.

Walls and colleagues (2019), in a study of adolescents, found that LGB students were at a higher risk of experiencing IPV compared to their heterosexual counterparts. They also found that mental health was significantly related to IPV with those reporting symptoms of depression having twice the odds of also experiencing IPV in comparison to those not reporting symptoms of depression. Thus, those who are experiencing IPV are at higher risk for experiencing depression. While these researchers show the link between higher rates of depression and sexual minority status, they do not disaggregate groups of LGB+ college students (i.e., lesbian, gay, bisexual) and thus, cannot discern individual groups of sexual minority college student's depressive symptomology.

Current Study

The current study uses secondary data from the Supporting Survivors and the Self (SSS) study (Edwards & Ullman, 2018) to explore the relationship between sexual minority groups, alcohol use, depression, and IPV victimization. The present study has four main hypotheses: (1) problem drinking and depressive symptoms would be associated with experiencing IPV, (2) sexual minority status would be associated with higher rates of problem drinking and depressive symptoms, (3) sexual minority status would be associated with higher rates of IPV compared to rates among heterosexual women and men, and (4) problem drinking and depressive symptoms will mediate the relationship between being a sexual minority and IPV victimization.

Method

Participants

Participants were 1,268 full-time undergraduate students. The mean age of participants was 19.6 (Range 18-24, SD = 1.23). Of the sample, over half of students identified as a woman (68.3%; $n = 866$), 30.8% ($n = 391$) identified as a man, and 0.4% ($n = 5$) identified as gender variant and/or gender queer. In regard to sexual orientation, 87.6% ($n = 1,111$) were heterosexual/straight, 2% ($n=25$) were gay or lesbian, 7.5% ($n=95$) were bisexual/pansexual, and 2% ($n=26$) were other or unsure. Participants could choose more than one race (i.e., multi-racial); they were 92.6% ($n = 1174$) White and 9.3% ($n= 117$) non-White. Descriptive statistics are displayed in Table 1.

Procedure

This study was conducted at a residential, public university in the northeast United States. Researchers recruited participants for the study in three ways. First, the university's dean of students sent emails to randomly selected, full-time, undergraduate students on the behalf of the research team which included information about the study and a link to the survey. Second, students were recruited via university professors with classes greater than 60 students ($n = 205$ classes) as identified by the course catalog. Finally, fliers were posted in residence halls and other shared spaces about the study. The majority of participants were recruited via email (78.4%; $n = 994$).

Measures

Sexual orientation by gender

Sexual orientation by gender was created by combining both the gender and sexuality questions. Gender was assessed by asking respondents to select one of the following options

following the question “what is your current gender” with response options such as, “woman,” “man,” “gender variant and/or gender queer,” or “choose to self-identify.” Sexual identity was gauged by asking respondents to select one of the following options following the question “do you think of yourself as...” with response options including, “heterosexual or straight,” “lesbian,” “gay,” “bisexual,” “pansexual,” “asexual,” “not sure,” or “choose to self-identify.” Each respondent was coded into one of the following categories, “heterosexual woman,” “heterosexual man,” “bisexual/pansexual woman,” “bisexual/pansexual man,” “other women,” and “other man”. Due to the extremely low response rate for gender variant/gender queer respondents, they were not included in the analyses.

IPV victimization

Two subscales from the Short Form Conflict Tactics Scale (CTS-SF) were used to assess incidences of lifetime and past 6-month intimate partner violence; the 2-item physical assault subscale and the 2-item psychological aggression subscale (Straus & Douglas, 2004). Four total items were included, two assessing psychological aggression (i.e., my partner insulted or swore or shouted or yelled at me, my partner destroyed something belonging to me or threatened to hit me) and two assessing physical assault (i.e., my partner punched or kicked or beat me up, my partner pushed, shoved or slapped me). Response options included yes or no. Three separate measures were created including lifetime IPV, lifetime psychological/verbal IPV, and lifetime physical IPV. For each of the measures (lifetime IPV, psychological/verbal IPV, physical IPV) participants were coded as 1 if they answered yes and 0 if they answered no.

Problem drinking

The Alcohol Quantity/Frequency Measure ALCQF-30D (past 30 days) was utilized to assess problem drinking (NIAAA, 2003). For the current measure, participants were asked,

“Please think about your typical drinking over the past 30 days. On a typical day, how many drinks have you had?” for each day of the week (Monday through Sunday). Response options ranged from 0 to 9+ drinks per day. Responses from each day of the week were averaged so that higher scores indicated higher engagement in alcohol use behaviors during the week ($M = 1.1$, $SD = 1.2$). Each participant received a mean score between 0-9+ drinks per week per day.

Depressive symptoms

The Center for Epidemiologic Studies Depression 10-item scale (Mirowsky & Ross, 2002) was used to assess depressive symptoms. The scale was adapted it to include the following seven items: (1) I felt that I could not shake off the blues, (2) I had trouble keeping my mind on what I was doing, (3) I felt that everything I did was an effort, (4) I had trouble getting to sleep or staying asleep, (5) I felt lonely, (6) I felt sad, and (7) I felt that I just could not get going. Response options ranged from rarely or none of the time (1) to most or all of the time (4). Items were summed so that higher scores are indicative of higher depressive symptoms ($M = 13.73$, $SD = 5.23$). The depressive symptom indicator had good internal consistency with a Cronbach’s alpha of .89.

Analytic Strategy

To examine whether problem drinking and depressive symptoms are associated with a higher likelihood of experiencing IPV victimization in the entire sample (hypothesis 1) independent samples t-tests were used. To test whether LGB+ status was associated with problem drinking and depressive symptoms (hypothesis 2) an analysis of variance was used. To examine whether individual sexual minority students (i.e., identified as gay male, lesbian female, pansexual/bisexual male, or pansexual/bisexual female) experienced higher rates of IPV than heterosexual students (hypothesis 3), a series of chi-square analyses were conducted. Sexual

minority student groups, categorized by participants responses to sex and sexual orientation questions, were individually compared regarding their experience of IPV victimization. In the analyses, groups of women were compared separately from groups of men. Research typically cites rates of all IPV victimization higher among females than among males (Tjaden & Thoennes, 2000). Thus, we were most interested to determine which groups of women experience high rates of IPV and risk correlates when compared to one another and similarly for men. Hypothesis: sexual minority status would be associated with higher rates of IPV compared to rates among heterosexual women and men. To examine whether problem drinking and depressive symptoms mediated the relationship between being a sexual minority and IPV victimization (hypothesis 4), logistic regression analyses were conducted using problem drinking and depressive symptoms as predictors.

Findings

To test the first hypothesis looking at whether problem drinking or depressive symptoms are associated with higher likelihood of also experiencing IPV independent samples t-tests were conducted (Table 2). There was a marginally significant difference in depressive symptoms ($M = 14.4$, $SD = 5.4$); $t = 3.59$, $p = .058$. between participants that had experienced any IPV at some point in their lifetime compared to participants that had never experienced IPV ($M = 13.3$, $SD = 5.1$). Additionally, there was a significant difference in alcohol use between participants that had experienced IPV at some point in their lifetime ($M = 1.3$, $SD = 1.2$) compared to participants that had never experienced IPV ($M = .94$, $SD = 1.1$); $t = 4.16$, $p < .05$.

Table 3 shows the results of the independent samples t-test between physical IPV and depressive symptoms or problem drinking. There was a significant difference in depressive symptomology among participants who had experienced lifetime physical IPV victimization (M

= 15.6, $SD = 5.8$) when compared to participants who had not ($M = 13.5$, $SD = 5.1$); $t = -4.7$, $p < .05$. There was also a significant difference in alcohol use among participants who had experienced lifetime physical IPV victimization ($M = 1.6$, $SD = 1.3$) when compared to participants who had not ($M = 1.0$, $SD = 1.2$); $t = 4.83$, $p < .05$.

Table 4 presents results from the independent samples t-test between psychological IPV and depressive symptoms and problem drinking. There was no significant difference in depressive symptoms between those who had experienced lifetime psychological IPV and those who had not experienced lifetime psychological IPV. Additionally, there was no significant difference in alcohol use between participants that had experienced psychological IPV at some point in their lifetime compared to those that had never experienced psychological IPV.

Female sample. Shown in Table 5, a chi-square test of independence was performed to examine the relation between women's sexual identity and lifetime IPV victimization. The relation between these variables was not significant ($\chi^2(2, N = 340) = .408$, $p = .816$). Heterosexual, bisexual/pansexual, and other women in the sample were equally likely to experience IPV victimization as heterosexual women. Table 5 shows the results of the second hypothesis that LGB+ status is associated with problem drinking or depressive symptoms. The analyses revealed significant differences in depressive symptoms between all three groups of women, $F(2, 841) = 30.79$, $p < .001$. Post hoc analyses using the Tukey HSD test indicated that depressive symptoms were significantly lower for heterosexual women ($M = 13.5$, $SD = 5.1$) compared to both bisexual/pansexual women ($M = 17.3$, $SD = 4.9$) and other sexual identity women ($M = 18.8$, $SD = 4.1$). A similar analysis of variance looking at differences in problem drinking among the three groups found no significant difference between heterosexual, bisexual/pansexual, and other sexual identity women, $F(2, 243) = 1.396$, $p = .248$.

Male sample. An additional chi-square test of independence, presented in Table 6, was performed to examine the relation between men's sexual identity and lifetime IPV victimization. The relation between these variables was not significant $\chi^2(2, N = 140) = 1.146, p = .564$. In this sample, heterosexual, bisexual/pansexual, and other men were also equally likely to experience IPV victimization. Additional ANOVA tests, presented in Table 6, showed similar patterns among groups of men as were found in the female sample. For instance, there were significant differences in depressive symptoms between all three groups of men, $F(2, 371) = 7.63, p < .01$. Post hoc analyses using the Tukey HSD test indicated depressive symptoms were significantly lower for heterosexual men ($M = 12.8, SD = 5.0$) compared to both bisexual/pansexual men ($M = 16.8, SD = 4.8$) and other sexual identity men ($M = 16.1, SD = 6.8$). Further, there appear to be no significant differences in problem drinking across these three groups of men, $F(2, 376) = 1.439, p = .238$.

Lastly, I intended to examine whether problem drinking or depressive symptoms mediated the relationship between sexual minority status and IPV victimization however, due to the lack of a direct effect between IPV victimization and sexual minority status, the final mediation analyses were not conducted.

Discussion

The current study sought to examine IPV among sexual minority and heterosexual students as well as identify potential risk factors for IPV such as depressive symptoms and problem drinking. Significant differences were found in reported depressive symptomology among women and men with sexual minority respondents experiencing higher rates of depressive symptomology when compared to heterosexual students. Consistent with the literature (Baams et al., 2015; Hatchel et al., 2017; Woodford et al., 2018) and with minority

stress theory (Meyer, 2003), sexual minority individuals are at a higher risk for depression due to the intense stigma they experience in their schools and communities. Among college students, this stigma may come from school staff, fellow students, and family members. Institutions such as colleges and universities need to work to foster an environment that aims to reduce stigma experienced by sexual minority students.

Further, depressive symptoms found to be marginally significantly related to lifetime IPV and significantly related to lifetime physical IPV. Consistent with the literature, mental health issues such as depression have been closely linked to experiences of IPV victimization (Walls et al., 2019). More specifically, Edwards (2018) found sexual minority youth who had experienced intimate partner violence victimization reported higher rates of depression when compared to both LGBTQ non-victims and heterosexual victims of IPV. These findings support the extant literature linking both sexual minority status to depression and further IPV victimization to depressive symptoms. Additionally, these findings extend exiting research by highlighting differences in which specific types of IPV are linked to depressive symptoms.

Higher problem drinking was not found to be significantly different between sexual minority students and non-sexual minority students. Perhaps this finding reflects the nature of the sample. Alcohol use is a salient part of college culture and problem alcohol use may be happening regardless of sexual minority status (Kelly-Weeder, 2011). Problem drinking in general has been linked to sexual minority status due to increased stressors experienced by this group (Meyer, 2003). However, it is possible that sexual minority students are not experiencing as much discrimination on this particular campus which engages in progressive anti-violence work and a very active LGBTQ+ center and thus, they are experiencing less minority stress.

Future research may see a smaller gap in problem drinking between sexual minorities and heterosexual college students on progressive campuses due to less experiences of discrimination.

In the current study, problem drinking was found to be significantly related to lifetime IPV victimization and lifetime physical IPV victimization. Consistent with the literature, problem drinking has been strongly linked to IPV (Waller et al., 2012). Researchers have uncovered that while alcohol use may be independently related to IPV, it may not be able to explain the disparity among sexual minorities experience of IPV (Goldberg & Meyer, 2012; Martin-Storey & Fromme, 2017). It is possible that the relation between alcohol use and IPV occurs separately from the relation between sexual minorities and IPV. Among college students, alcohol use is a particularly salient issue because of the increased access to alcohol and tendency to engage in binge drinking (Kelly-Weeder, 2011). Thus, it is extremely important to understand the relation between problematic alcohol use and heightened rates of IPV.

In this sample, there were no significant differences in any type of lifetime IPV victimization between sexual minority students and heterosexual students for both women and men. These findings contradict the vast majority of research that finds links between sexual minority status and higher rates of IPV (Edwards et al., 2015; Halpern et al., 2004; Houston & McKirnan, 2007; Martin-Storey, 2015; Walters et al., 2013). Although nonsignificant, there were however descriptively higher rates of IPV among bisexual respondents. Researchers have generally found higher rates of IPV among bisexual youth who often face discrimination from both heterosexual and gay communities (Langenderfer-Magruder et al., 2016; Whitton et al., 2019). These findings, while divergent from much of the literature, may present some interesting implications. While much of the country is still very divisive on the topic of sexual minority rights and discrimination, generally New England seems to be a front runner in inclusion.

Therefore, it is possible the climate of this area, and of the campus specifically, can be attributable to the similar rates of IPV between sexual minority students and heterosexual students.

Limitations

The current study is not without limitations. First, there was a small sample size of sexual minority students compared to that of heterosexual respondents. Oversampling of sexual minority respondents would have improved power in the analyses. With larger samples in each of the sexuality/gender subcategories there likely would have been more evident significant differences. Without the information from many sexual minority respondents, we are unable to say that these findings are applicable among all sexual minority individuals. In order to better understand a phenomenon among a specific group it would be beneficial to have a larger sample. Some methodological issues should also be taken into account. First, due to the sample size we were only able to assess lifetime IPV victimization rather than 6-month IPV victimization. It would be beneficial to assess past 6-month incidence rates rather than lifetime incidence rates because we cannot be sure whether risk factors and correlates can be attributable to lifetime victimization history. Next, we were only able to use four items to assess intimate partner violence victimization which may have been better served with additional items. LGB+ individuals may experience tactics of IPV that are unique compared to heterosexual victims such as identity abuse (i.e., threats of outing). Additionally, we failed to ask the sex/gender of the individual's perpetrator which is important in gauging whether they are experiencing victimization in a relationship concurrent with their sexuality. Within this age group, it is possible that they may have identified their sexuality on the survey but are not out to the public or dating people of their preferred gender yet. In regard to alcohol use, only one indicator was

used to assess problem drinking and while it was used as a proxy for minority stress it is unclear whether the drinking was because of minority stress. Lastly, due to the cross-sectional nature of this study the directionality cannot be determined regarding the connection between IPV and problem drinking or depressive symptoms.

Implications and Future Research

The current effort to investigate IPV among sexual minority individuals needs to continue to identify the risks and correlates that contribute to the higher rates of victimization. This study has many implications for research and practice. Although there is a push for college campuses to allocate resources for LGB+ students, campuses need to specifically address issues such as IPV in conjunction with drinking behaviors and depressive symptoms. More specifically, depression was found to be significantly related to sexual minority status. Although this finding is not new, the continual evidence presents a critical need to address this issue. College campuses should allocate specific resources to addressing mental health among LGB+ students which may include counseling opportunities and 24/7 confidential hotlines.

In regards to future research, the link between alcohol use and depression and the type of IPV victimization (i.e., physical, psychological) should be further explored. Future research should also aim to clarify the directionality of the relationship between these variables among LGB+ individuals. Researchers should continue to categorize each individual group separately because risk factors may be different from group to group. Additionally, researchers in this field should aim to oversample sexual minority respondents in order to obtain equitable sample sizes among differing groups. Learning from the limitations of this study, a question about the gender identity about the respondent's most recent partner(s) is necessary among this age group especially.

Conclusion

The current study adds to the growing literature regarding the unique and pressing issues among the LGB+ community. While this study is not the first to assess the risks and correlates of IPV among LGB+ college students, it is unique in that it highlights the importance of disaggregating groups of LGB+ individuals in order to better understand IPV and specific correlates within each group. Additionally, it emphasizes the importance of understanding the connection between sexual minority individuals, depression, alcohol use, and intimate partner violence.

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Table 1. Descriptive Statistics

Variable	% or M (SD)	Range
Lifetime IPV	39.4	0-1
Physical IPV	11.4	0-1
Psychological IPV	37.9	0-1
Depressive Symptoms	13.73 (5.23)	3-25
Alcohol Use	1.10 (1.21)	0-9
Sex and Gender Identity		0-6
Heterosexual woman	59.5	
Bisexual/pansexual woman	5.8	
Other woman	2.0	
Heterosexual man	27.8	
Bisexual/pansexual man	1.4	
Other man	1.3	
Race		0-1
White	92.6	
Non-White	9.3	
Age	19.56 (1.23)	18-24

Table 2. Independent samples t-test between Lifetime IPV and risk factors

Variable	Lifetime IPV		No Lifetime IPV		<i>F</i>	<i>df</i>	<i>p</i>
	<i>n</i>	<i>M</i> (<i>SD</i>)	<i>n</i>	<i>M</i> (<i>SD</i>)			
Depressive Symptoms	484 _a	14.4(5.4)	741 _a	13.3(5.1)	3.594	1,223	.058
Problem Drinking	483 _a	1.3(1.2)	745 _b	.94(1.1)	4.158	1,226	<.05

Table 3. Independent samples t-test between Physical IPV and risk factors

Variable	Lifetime Physical IPV		No Lifetime Physical IPV		<i>F</i>	<i>df</i>	<i>p</i>
	<i>n</i>	<i>M</i> (<i>SD</i>)	<i>n</i>	<i>M</i> (<i>SD</i>)			
Depressive Symptoms	144 _a	15.6(5.8)	1,094 _b	13.5(5.1)	5.442	1,236	<.05
Problem Drinking	144 _a	1.6(1.3)	1,106 _b	1.0(1.2)	4.833	1,248	<.05

Note: Each subscript letter denotes a subset of class categories whose column proportions differ significantly from each other at the .05 level. Column proportions with matching letters do not differ significantly.

Table 4. Independent samples t-test between Psychological/Verbal IPV and risk factors

Variable	Lifetime Psychological IPV		No Lifetime Psychological IPV		<i>F</i>	<i>df</i>	<i>p</i>
	<i>n</i>	<i>M</i> (<i>SD</i>)	<i>n</i>	<i>M</i> (<i>SD</i>)			
Depressive Symptoms	475 _a	14.4(5.4)	763 _a	13.3(5.1)	3.437	1,236	.064
Problem Drinking	474 _a	1.3(1.2)	776 _a	.97(1.2)	1.737	1,248	.188

Note: Each subscript letter denotes a subset of class categories whose column proportions differ significantly from each other at the .05 level. Column proportions with matching letters do not differ significantly.

Table 5. Chi-square and ANOVA tests for independence between women, IPV, and risk factors

Variable	Heterosexual female		Bisexual/pansexual female		Other female		<i>F or</i> χ^2	<i>df</i>	<i>p</i>
	<i>n</i>	% or M(SD)	<i>n</i>	% or M(SD)	<i>n</i>	% or M(SD)			
Lifetime IPV	298 _a	40.0%	32 _a	43.8%	10 _a	40.0%	.408	2	.816
Physical IPV	75 _a	9.9%	12 _a	16.2%	3 _a	12.0%	2.880	2	.237
Psychological IPV	295 _a	39.1%	31 _a	41.9%	10 _a	40.0%	.229	2	.892
Depressive Symptoms	745 _a	13.5(5.1)	73 _b	17.3(4.9)	24 _b	18.8(4.1)	30.79	2	<.001
Problem Drinking	748 _a	.98(1.0)	73 _a	.94(1.3)	25 _a	.65(1.0)	1.40	2	.248

Note: Each subscript letter denotes a subset of class categories whose column proportions differ significantly from each other at the .05 level. Column proportions with matching letters do not differ significantly.

¹ The Fisher-Freeman-Halton Exact Test utilized.

Table 6. Chi-square and ANOVA tests for independence between men, IPV, and risk factors

Variable	Heterosexual male		Bisexual/pansexual male		Other male		<i>F or</i> χ^2	<i>df</i>	<i>p</i>
	<i>n</i>	% or M(SD)	<i>n</i>	% or M(SD)	<i>n</i>	% or M(SD)			
Lifetime IPV	126 _a	37.0%	8 _a	50.0%	6 _a	35.3%	1.146	2	.564
Physical IPV	45 _a	12.8%	4 _a	22.2%	3 _a	17.6%	1.582	2	.453
Psychological IPV	121 _a	34.4%	8 _a	44.4%	6 _a	35.3%	.766	2	.682
Depressive Symptoms	339 _a	12.8(5.0)	16 _b	16.8(4.8)	17 _b	16.1(6.8)	7.63	2	<.01
Problem Drinking	344 _a	1.4(1.5)	18 _a	1.1(.98)	17 _a	.85(1.3)	1.44	2	.238

Note: Each subscript letter denotes a subset of class categories whose column proportions differ significantly from each other at the .05 level. Column proportions with matching letters do not differ significantly.

¹ The Fisher-Freeman-Halton Exact Test utilized.